



Document Title:

# Fiberglass Flat Step Extension Ladders

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## Document History

Date	Revision Comments
December 16, 2022	Initial Release. Converted from PREPA to LUMA format
February 20, 2023	Modify Specification and add warehouse catalog

Warehouse Catalog	Item Version	Date
072-78086	3	2/20/2023
072-02443	10	2/20/2023



## Fiberglass Flat Step Extension Ladders

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### 1. Introduction

This is a general specification that covers the minimum requirements for the fiberglass flat step extension ladders to be used in the distribution system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site specific conditions, quantity, and other requirements. This document includes the general mechanical characteristics of the material.

### 2. Special Requirements

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this material to PREPA / LUMA on previous orders, will not have to furnish samples at bid opening. The material will be received at the LUMA's general warehouse (011) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

### 3. Quantity/Literature

Descriptive and technical literature must be supplied by vendor at time of bidding. This literature may include, but is not limited to details of material, drawings, documented testing, and instructions for use and installation. Failure to submit documents on time will cause bidder disqualification. For products described in this specification as requiring qualification, awards will be made only for such products that, prior to the time for opening of bids, had been tested and/or approved by LUMA. Evidence of PREPA's and/or LUMA Energy's approval of the equipment or material shall be supplied by vendor if requested by LUMA Energy.

### 4. Markings

- 4.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 4.2. Packaging labels and tags shall be waterproof.

### 5. Equal or Approved Equal to

- 5.1. 16 ft.-Little Giant: 17916-268V
- 5.2. 24 ft.-Little Giant: 17924-186

## **Fiberglass flat step extension ladders (24 ft.)**

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### **6. Packaging**

All material and equipment shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.

### **7. Number Per Package (Logistics)**

One unit (1) or as requested by LUMA Energy.

### **8. Acceptance Criteria**

8.1. Test required: certified by external qualified laboratories.

a. Latest applicable codes, standards, and other regulations: OSHA compliant for safety

### **9. Description**

9.1. Fiberglass flat step extension ladder with "D" rungs.

9.2. Side rails of 3-1/4 in. shall be made of fiberglass.

9.3. Shall have non-marring polycarbonate end caps.

9.4. Shall have weather resistant UV inhibiting compound in fiberglass resin for extended outdoor use.

9.5. Shall have heavy-duty aluminum side mounted dual pulley system.

9.6. Shall have a side mounted dual pulley rope system with a 5/16 in. braided rope to reduce strain upon raising and lowering the fly section.

9.7. Shall have large, smoothly operating extruded gravity/spring locks with spring-activated flipper.

9.8. Shall have deeply serrated aluminum flat rungs of 1-1/2 in.

9.9. Pole latch shall have two snap hooks, one at each end.

9.10. Shall have internal guides on bottom of fly section and external guides on top of base to securely interlock rails.

9.11. Shall have an adjustable pole lash installed those wraps around pole.

9.12. Shall have a shock absorbing brace and rail bracket and shoe with looking Sure Set feet.

9.13. Shall have co-molded non slip rubber wall pads to protect working surfaces and provides superior stability.

9.14. Shall have a V-rung on top of fly section for stability against pole.

9.15. Shall have side to side, front to back angle level bubbles.

**Equipment Specification**

**Document No.:** 4350.260

**Originating Department:** Distribution Engineering

**Fiberglass flat step extension ladders (24 ft.)**

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- 9.16. Extension ladder shall be Type 1AA with a duty rating of 375 lbs.
- 9.17. The warranty shall not be less than the one offered by the manufacturer.
- 9.18. Working Length and Weight:
  - a. Warehouse Catalog: 072-78086; Asset Suite: 78086: (16 ft.)
    - 1. The maximum working length is 13 ft.
    - 2. The maximum Weight does not exceed including V-Rung is 35 lbs.
  - b. Warehouse Catalog: 072-02443; Asset Suite: 54998: (24 ft.)
    - 1. The maximum working length is 21 ft.
    - 2. The maximum Weight does not exceed including V-Rung is 47 lbs.

**10. Inspection**

The acceptance of any material or equipment shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it would not prevent subsequent rejection if such materials were found later to be defective.

**11. Proposal Information**

- 11.1. Submitted proposals must include:
  - a. Technical information
  - b. Table of Compliance completed by the bidder with reference. (See Appendix 1)

— End of Specification —

**Equipment Specification**  
**Document No.:** 4350.260  
**Originating Department:** Distribution Engineering

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# **Appendix**

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### **Appendix 1: Table of Compliance**

<b>Line</b>	<b>Criteria</b>	<b>Description</b>	<b>Pass/Fail (P/F)</b>	<b>Comments</b>
<b>1</b>	Specification	The Proponent complies with the corresponding specification document.		
<b>2</b>	Industry Standards	The Proponent complies with the industry standards established in the specification document.		
<b>3</b>	Maximum Working Length	<ul style="list-style-type: none"><li>• Total length: 16 ft; Working length: 13 ft.</li><li>• Total length: 24 ft; Working length: 21 ft.</li></ul>		
<b>4</b>	Weight Including V-Rung	<ul style="list-style-type: none"><li>• Total length: 16 ft; Maximum Weight: 35 lbs.</li><li>• Total length: 24 ft; Maximum Weight: 47 lbs.</li></ul>		
<b>5</b>	Duty Rating	375 lbs. Type 1AA		
<b>6</b>	Warranty	Shall not be less than the one offered by the manufacturer.		











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Final Audit Report

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